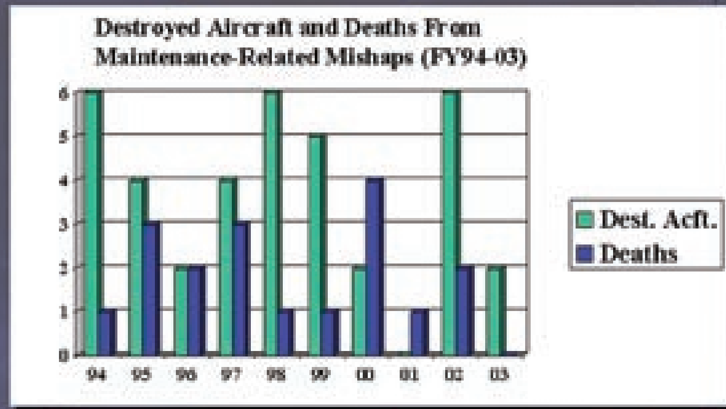
WORK ZONE
REDUCING MISHAPS BY 50%

Maintenance-Related Mishaps (FY94-03)



The Cost:

- $873,009,104
- 18 Shipmates, Marines and friends dead.
- 37 aircraft destroyed and many more unavailable for extended periods, dramatically affecting readiness.

Which Communities Are at Risk?

- Fighter: 8 destroyed and 1 dead
- Attack: 19 destroyed and 8 dead
- Helos: 5 destroyed and 7 dead
- Trainers: 3 destroyed and 2 dead
- Other: 2 destroyed and 0 dead

When aircraft crash because of maintenance malpractice?

Sun–30, Mon–61, Tue–84, Wed–88, Thu–96, Fri–81, Sat–51

What are common causes (reason and number of events)?

- Supervision – 270
  - Failed to manage/supervise personnel/assets – 96
  - Failed to demand adherence to technical doctrine – 77
  - Inadequately inspected – 59
- Production – 360
  - Failed to follow technical procedure – 130
  - Improperly installed – 65
  - Lost situational awareness – 46

Top 10 List of Billets Found Culpable in Mishaps

O-Level	Top 10	I-Level	Top 10	Depot	Top 10	Contractor	Top Ten
63	Maint Off	6	Pwr Plants	12	Pwr Plants	6	Pwr Plants
58	WC Supv	4	AF-Struct	9	AF - Struct	5	WCS
51	MC Supv	3	AF-NDI	5	CO	5	QAR
49	CDI	3	Ordnance	4	QAO	4	AF – Tire/Wheel
48	Airframes	3	Maint Admin	3	Prod Cont Off	3	Avionics
43	Plane Capt.	2	Prod Cont Off	2	Maint Off	2	Maint Off
33	Pwr Plants	2	WCS	2	QAR	2	CDI
32	TD/Fuel Chr	2	CDI	2	WCS	2	ALSS/Seats
32	Ordnance	1	QAR	2	Prop Shop	2	AF – Struct
32	QAR	1	Avionics	2	DivOff	2	AF – Hyd

The most consecutive mishap-free days in 10 years was 43 days. Working together, we can reduce mishaps 50 percent in the next two years! Every maintainer can make a difference, so be part of the solution not part of the problem.

How can we fix these problems?

- Ensure every job is supervised.
- Use the book every time and make sure every Sailor is taught to avoid shortcuts and to follow the step-by-step procedures in the maintenance manuals.
- Do thorough in-process and final inspections.
- Make sure Sailors and Marines are rested and are focused on their duties.
- Do self-assessments and ask for safety surveys.
- Use the information in this magazine, messages and other media to help maintainers work to reduce mishaps.

"World-class organizations do not tolerate preventable accidents." –Donald Rumsfeld, SecDef

These charts show the relationship between injury classification and mishaps or incidents caused by maintainers and aviators. Remember, some incidents can involve a maintenance and aircrew causal factor (double reporting). Aircraft and events are included to show that some single events involve multiple aircraft and to correlate the number of events to injuries or deaths. Lost-work day (LWD) and first-aid injuries are included.

No Intent for Flight (Ground Incidents)

Jan. 01, 1980 to Sept. 30, 2003

Injury Class	No. of People	
	Maint	Aircrew
A – Fatal	27	8
B – Perm Total Disability	1	0
C – Perm Partial Disability	46	4
D – 5 or Greater LWD	499	27
E – 1-4 LWD	411	5
F – First-Aid Injury	41	16
Totals	1025	60

No. of events:
Maint. 1602
Aircrew 225

No. of aircraft:
Maint. 1689
Aircrew 271

Intent for Flight (Takeoff, In-Flight or Landing Incidents)

Jan. 01, 1980 to Sept. 30, 2003

Injury Class	No. of People	
	Maint	Aircrew
A – Fatal	89	815
B – Perm Total Disability	3	7
C – Perm Partial Disability	10	53
D –5 or Greater LWD	104	300
E – 1-4 LWD	77	256
F – First-Aid Injury	177	725
Totals	460	2156

No. of events:
Maint. 950
Aircrew 2177

No. of aircraft:
Maint. 978
Aircrew 2561

Maintainers are responsible for more ground incidents and their related injuries than those caused by aviators (no surprise). However, it is interesting to note the number of fatalities and lost-work day injuries linked to maintenance causal factors in the ground and in-flight categories. The number of first-aid injuries reported in the intent-for-flight category is significantly higher than ground, in part because a maintainer is unlikely to report a first-aid injury. Aviators are more likely to report these types of injuries because it is part of the hazrep culture to do so. It is important for maintainers to see the range and severity of injuries caused from maintenance error. We must do better to prevent mishaps and incidents.

Photograph by PH2 Marjorie McNamee